

# BRAZIL CITY WATER WORKS

## 2009 Consumer Confidence Report

PWSID 5211001

**Opportunities for Public Participation:** Common council meetings are held the second Wednesday of each month at 7 pm. Public Board of Works & Safety meetings are held the second Tuesday of each month at 10 am, and the last Thursday of each month at 10 am. All meetings are held in the council chambers of City Hall.

**Is your water safe?** This brochure is being provided so that you the water customer may know the quality of the drinking water that we provided last year. Included as part of this report are details about where the water that you drink comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and Indiana standards. We are committed to provide you with all the information that you need to know about the quality of the water that you drink.

**Do I need to take special precautions?** Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as people with cancer undergoing chemotherapy, people who have undergone organ transplant, people with HIV/AIDS or other kind of immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA has set guidelines with appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants which are available from the Safe Drinking Water Hotline at (800) 426-4791.

**Where does our water come from?** The source of water for the City of Brazil is ground water. The wells serving this system are drilled wells all of which have an average depth of 65 feet. This water source has been classified by the Indiana Department of Environmental Management, as "Ground Water Source," not under the influence of surface water.

**Why are there contaminants in my drinking water?** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or of human activity. Contaminants that may be present in source water include:

- **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic Contaminants**, such as salts and metals, which can be naturally-occurring, or that result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, and mining or farming operations.
- **Pesticides and Herbicides**, which may come from a variety of sources, such as agriculture, storm water runoff, and residential uses.
- **Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production operations, and can also, result from gas stations, urban storm water runoff, and septic systems.
- **Radioactive Contaminants**, which can be naturally-occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants that may be present in the water provided by public drinking water systems. We are required to treat our water according to EPA's regulations. Moreover, FDA regulations establish limits for contaminants that may be present in bottled water, which must provide the same level of health protection for public health.

**Some of the terms and abbreviations used in this report are:**

MCL: Maximum Contaminant Level, the highest level of a contaminant that is allowed in drinking water.

MCLG: Maximum Contaminant Level Goal, the level of a contaminant in drinking water below which there is no known or expected risk to health.

MRDL: Maximum Residual Disinfectant Level, the highest level of disinfectant allowed in drinking water.

MRDLG: Maximum Residual Disinfectant Level Goal, the level of drinking water disinfectant below which there is no known or expected risk to health.

AL: Action Level, the concentration of a contaminant which, when exceeded, triggers treatment or other requirements or action which a system must follow.

TT: Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water

NTU: Nephelometric Turbidity Unit, a measure of the clarity (or cloudiness) of water.

ppm: parts per million, a measure for concentration equivalent to milligrams per liter (mg/L).

ppb: parts per billion, parts per billion, a measure for concentration equivalent to micrograms per liter (mg/L).

MFL: million fibers per Liter

PCi/L: picocuries per liter, a measure for radiation.

P\*: Potential violation, one that is likely to occur in the near future once the system have sampled for four quarters.

n/a: either not available or not applicable.

ND: Not Detected, the result was not detected at or above the analytical method detection level.

The table "**Section I- Contaminants Detected**" on the opposite side of this report lists all the contaminants that we detected during the 2009 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise indicated, the data presented in this table is from testing done between January 1 and December 31, 2009. The Indiana Department of Environmental Management (IDEM) requires us to monitor for certain contaminants at a frequency less than once per year because the concentrations of these contaminants are not expected to vary significantly from one year to another. Some of the data, though representative of the water quality, may however be more than one year old.

### **Section I – Contaminants Detected**

Contaminants	Violation yes/no	Level Detected	Unit Measure	MCL	MCLG	Major Sources in Drinking Water			
Volatile Organic Compounds (year: 2008) IN5211001									
Bromodichloromethane	no	0.66	ug/L	NA	NA	By products of drinking water disinfection.			
Chloroform	no	0.84	ug/L	NA	NA	By products of drinking water disinfection.			
Inorganic Compounds (year: 2008) IN5211001									
Barium	no	0.0551	mg/L	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.			
Chromium	no	0.002	mg/L	0.1	0.1	Discharge from steel and pulp mills; erosion of natural deposits.			
Fluoride	no	0.126	mg/L	4		Water additive which promotes strong teeth; erosion of natural deposit; discharge from fertilizer and aluminum factories			
Sodium	no	9.34	mg/L	NA	NA	Naturally occurring.			
Asbestos	no	0.17	MFL	7		Decay of asbestos cement in water mains; erosion of natural deposits			
Nitrate-N (year: 2009)	no	1.9	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.			
Total Trihalomethanes (IN5211001)									
Total THM's (year: 2009)	no	15.2	ppb	80	NA	By products of drinking water disinfection.			
Haloacetic Acids (IN5211001)									
Total HAA5 (year:2009)	no	7.7	ppb	60	NA	By products of drinking water disinfection.			
Lead/Copper Testing: 20 sites consisting of residential & commercial sampled with 90% of samples equal to or less than the number of sites sampled. None of the sites tested exceeded the MCL.									
Lead (year: 2008)	no	0.0149	mg/L	AL=0.015	0	Corrosion of household plumbing systems; erosion of natural deposits.			
Copper (year 2008)	no	0.4257	mg/L	AL=1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.			
Radium 228 in pCi/l testing									
Radium 228 in pCi/l testing	no	0.1	pCi/l	5	5	Naturally occurring or can be the result of oil and gas production and mining activities.			
Residual Disinfectant									
Contaminant	Date	MCL	MCLG	Units	Result	Min	Max	Violations	Likely Sources
Chlorine Residual	2009	4 MRDL		mg/l	0.74	0.24	1.65	None	Water additive (disinfectant) used to control microbiological organisms.
Micobiological Contaminants									
Violations		Begin Date		End Date		Contaminant			
None		1/1/2009		12/31/2009		COLIFORM, TOTAL (TCR)			
Health effects information associated with Total Coliform (TCR):									
Coliform, Total (TCR): Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.									